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Islamabad



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COMPUTER AIDED DESIGNING (CAD)

Assessment Package

National Vocational
Certificate Level 4

Version 1 - August 2019



Implemented by
giz Deutsche Gesellschaft
für internationale
Zusammenarbeit (GIZ) GmbH

Published by

National Vocational and Technical Training Commission
Government of Pakistan

Headquarter

Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan
www.navttc.org

Responsible

Director General Skills Standard and Curricula, National Vocational and Technical Training Commission
National Deputy Head, TVET Sector Support Programme, Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH

Layout & design

SAP Communications

Photo Credits

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This document has been produced with the technical assistance of the TVET Sector Support Programme,
which is funded by the European Union, the Federal Republic of Germany and the Royal Norwegian
Embassy and has been commissioned by the German Federal Ministry for Economic Cooperation and
Development (BMZ). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in close
collaboration with the National Vocational and Technical Training Commission (NAVTTTC) as well as
provincial Technical Education and Vocational Training Authorities (TEVTAs), Punjab Vocational Training
Council (PVTTC), Qualification Awarding Bodies (QABs) and private sector organizations.

Document Version

August, 2019

Islamabad, Pakistan

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Assessment Package

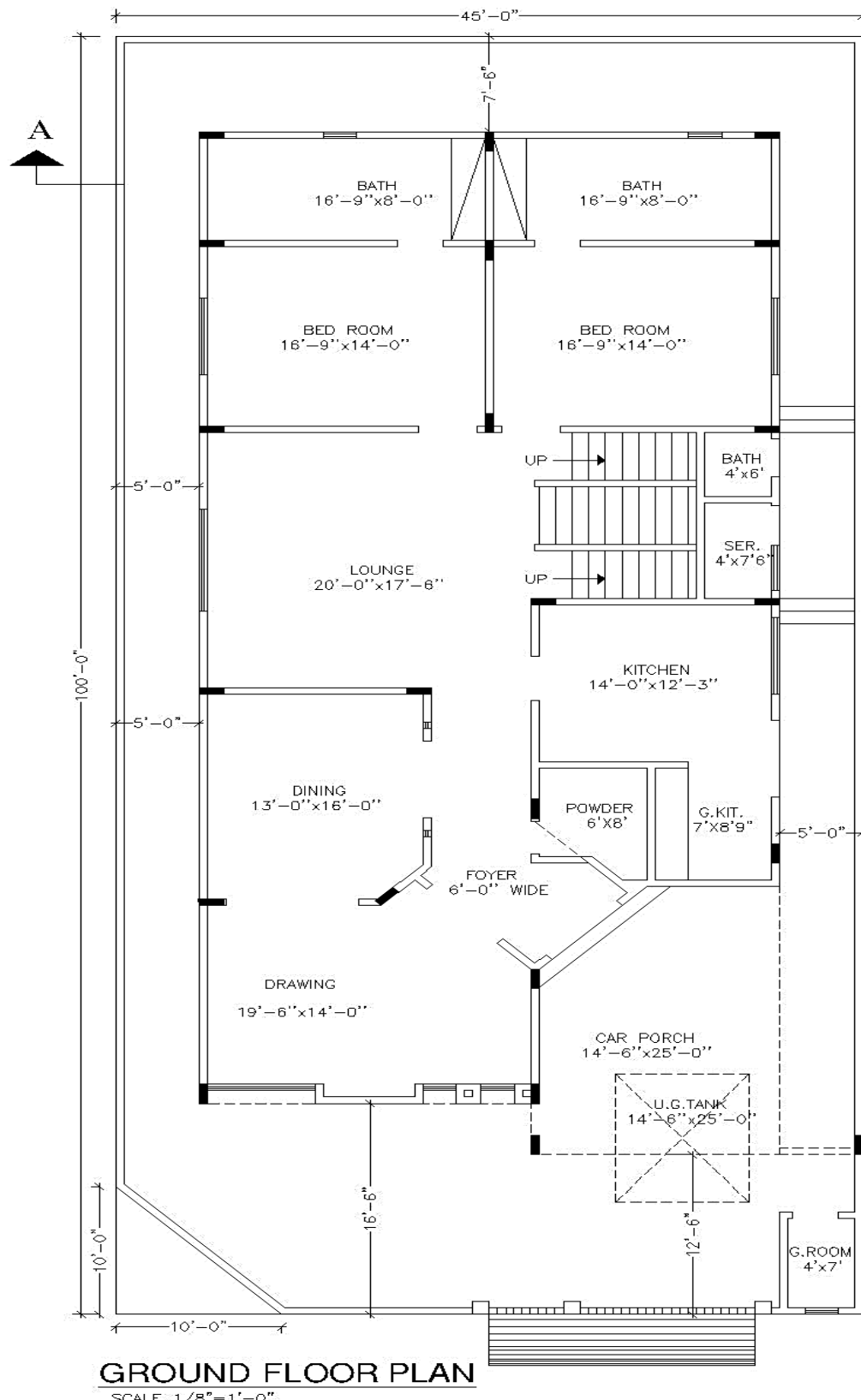
National Vocational
Certificate Level 4

Version 1 - August 2019

Instruction Sheet for the Candidate

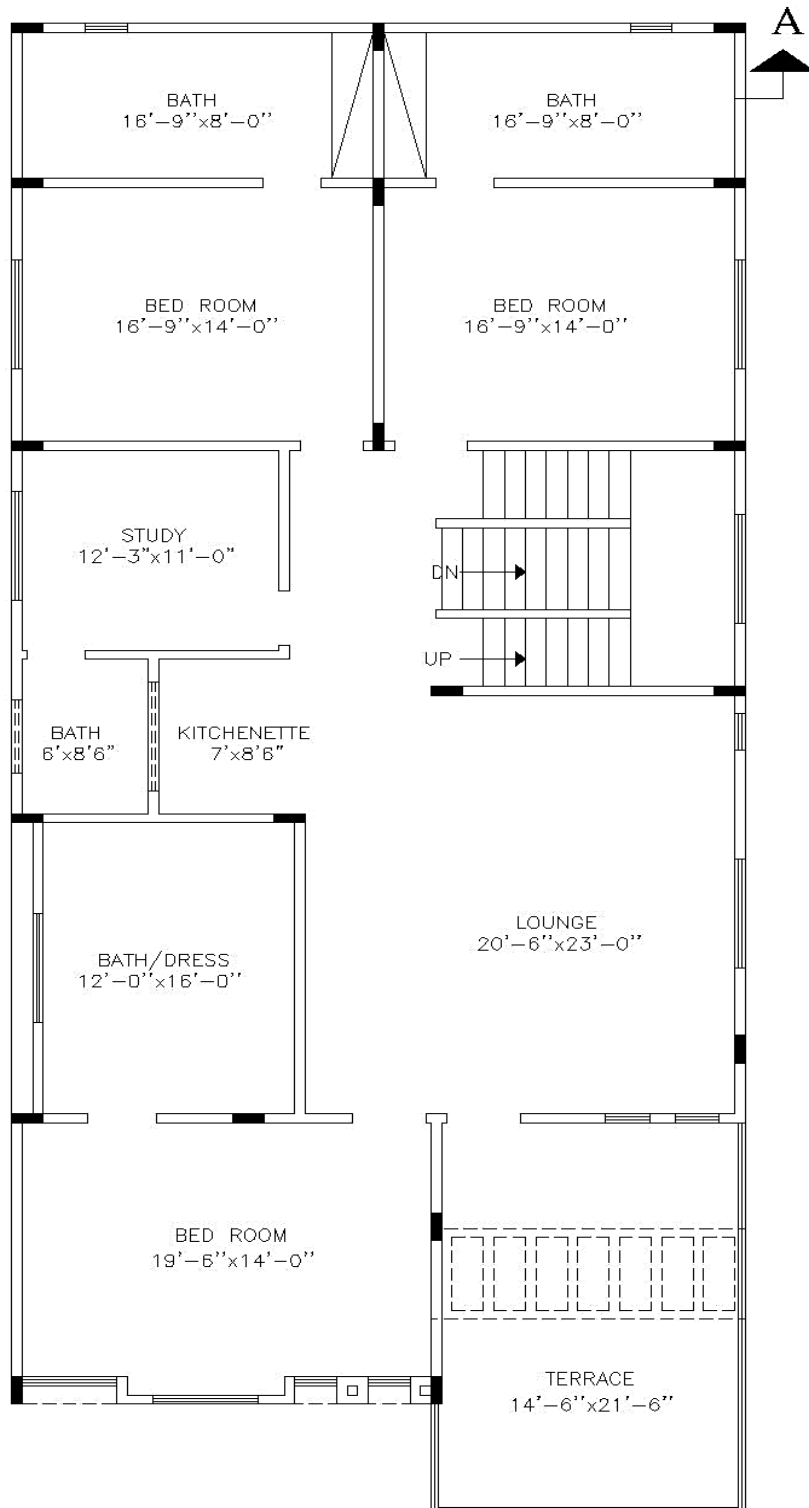
Qualification	National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Competency Standard	061100493 Develop 3D Model using Autodesk 3ds Max
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration Number_____
Guidance for Candidate	To meet this standard you are required to complete the following within 4 Hrs. time frame (for practical demonstration & assessment): <ol style="list-style-type: none"> 1. Create a 3D 'House Model according to given sample (Annexure-A) and take the printout of the model from different camera views. 2. Knowledge Assessment
Time: 04 Hrs	During a practical assessment, under observation by an assessor, you are required to “Develop 3D House Model according to given sample in Annexure-A and take printout of different camera views“ demonstrating the following criteria:
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification 2. Use Geometry & shapes to make 3D objects according to given specification. 3. Modify Parameters of 3D objects according to given specification. 4. Apply modifiers for object manipulation to meet the specific requirements. 5. Create/assign specified materials and textures to 3D Model. 6. Edit materials and textures to get realistic outcome. 7. Assign/Install Renderer to meet specific outcome as per requirement. 8. Add scene of 3D model according to specification 9. Add lights for illumination to get the requisite scene of 3D model. 10. Assign cameras to execute different views of 3D Model. 11. Render the 3D model according to required image size or resolution & orientation.

ANNUXURE-A



GROUND FLOOR PLAN

SCALE 1/8"=1'-0"



FIRST FLOOR PLAN

SCALE 1/8"=1'-0"

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Competency Standard	061100493 Develop 3D Model using Autodesk 3ds Max
Purpose of Assessment	Formative Assessment
Assessment Task	Create a 3D 'House Model according to given sample (Annexure-A) and take the printout of the model from different camera views.

I can.....

Performance Criteria	Yes	No
1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification	<input type="checkbox"/>	<input type="checkbox"/>
2. Use Geometry & shapes to make 3D objects according to given specification.	<input type="checkbox"/>	<input type="checkbox"/>
3. Modify Parameters of 3D objects according to given specification.	<input type="checkbox"/>	<input type="checkbox"/>
4. Apply modifiers for object manipulation to meet the specific requirements.	<input type="checkbox"/>	<input type="checkbox"/>
5. Create/assign specified materials and textures to 3D Model.	<input type="checkbox"/>	<input type="checkbox"/>
6. Edit materials and textures to get realistic outcome.	<input type="checkbox"/>	<input type="checkbox"/>
7. Assign/Install Renderer to meet specific outcome as per requirement.	<input type="checkbox"/>	<input type="checkbox"/>
8. Add scene of 3D model according to specification	<input type="checkbox"/>	<input type="checkbox"/>
9. Add lights for illumination to get the requisite scene of 3D model.	<input type="checkbox"/>	<input type="checkbox"/>
10. Assign cameras to execute different views of 3D Model.	<input type="checkbox"/>	<input type="checkbox"/>
11. Render the 3D model according to required image size or resolution & orientation.	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Competency Standard	061100493 Develop 3D Model using Autodesk 3ds Max
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task	Create a 3D 'House Model" according to given sample (Annexure-A) and take the printout of the model from different Camera views.		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification			
2. Use Geometry & shapes to make 3D objects according to given specification.			
3. Modify Parameters of 3D objects according to given specification.			
4. Apply modifiers for object manipulation to meet the specific requirements.			
5. Create/assign specified materials and textures to 3D Model.			
6. Edit materials and textures to get realistic outcome.			
7. Assign/Install Renderer to meet specific outcome as per requirement.			
8. Add scene of 3D model according to specification			
9. Add lights for illumination to get the requisite scene of 3D model.			
10. Assign cameras to execute different views of 3D Model.			
11. Render the 3D model according to required image size or resolution & orientation.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	

Knowledge Assessment

Qualification	National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Competency Standard	061100493 Develop 3D Model using Autodesk 3ds Max
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration Number: _____ Candidate Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	How do you Toggle Grid On/Off?		
2.	What shortcut key is used to Enlarge/Reduce a Viewport?		
3.	What is the purpose of Modifier in 3ds Max?		

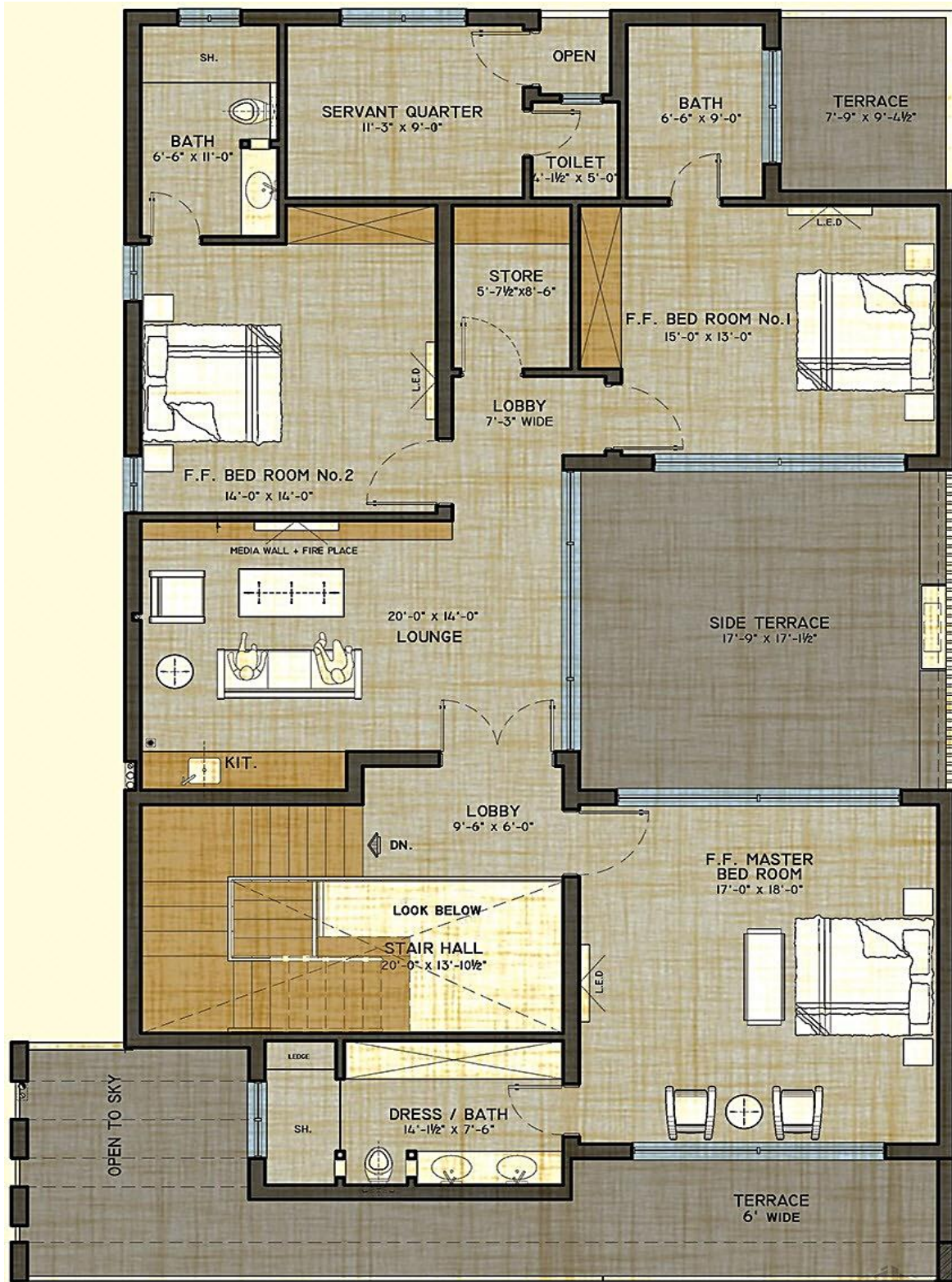
4.	The Y Axis is Displayed Using What Color?		
5.	Where you get "Boolean" Command??		
6.	How do you change an active Viewport?		

Feedback to the Candidate	
Candidate's Signature _____ Assessor's Signature _____	

Instruction Sheet for the Candidate

Qualification	0611ICT10National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Purpose of Assessment	Summative Assessment
Candidate Details	Name _____ Registration Number _____
Guidance for Candidate	To meet this standard you are required to complete the following within 4 Hrs. time frame (for practical demonstration & assessment): 1. Create a 3D 'House Plan' according to given sample (Annexure-A) and take the printout of the plan from different views. 2. Knowledge Assessment
Time: 04 Hrs	During a practical assessment, under observation by an assessor, you are required to “Develop drawing given in Annexure-A as per given dimension and specification “ demonstrating the following criteria:
Minimum Evidence Required	1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification 2. Use Geometry & shapes to make 3D objects according to given specification. 3. Modify Parameters of 3D objects according to given specification. 4. Apply modifiers for object manipulation to meet the specific requirements. 5. Create/assign specified materials and textures to 3D Model. 6. Edit materials and textures to get realistic outcome. 7. Assign/Install Renderer to meet specific outcome as per requirement. 8. Add scene of 3D model according to specification 9. Add lights for illumination to get the requisite scene of 3D model. 10. Assign cameras to execute different views of 3D Model. 11. Render the 3D model according to required image size or resolution & orientation.

ANNUXURE-A



Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	0611ICT10National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Purpose of Assessment	Summative Assessment
Assessment Task	Create a 3D 'House Plan' according to given sample (Annexure-A) and take the printout of the plan from different views.

I can.....

Performance Criteria	Yes	No
1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification	<input type="checkbox"/>	<input type="checkbox"/>
2. Use Geometry & shapes to make 3D objects according to given specification.	<input type="checkbox"/>	<input type="checkbox"/>
3. Modify Parameters of 3D objects according to given specification.	<input type="checkbox"/>	<input type="checkbox"/>
4. Apply modifiers for object manipulation to meet the specific requirements.	<input type="checkbox"/>	<input type="checkbox"/>
5. Create/assign specified materials and textures to 3D Model.	<input type="checkbox"/>	<input type="checkbox"/>
6. Edit materials and textures to get realistic outcome.	<input type="checkbox"/>	<input type="checkbox"/>
7. Assign/Install Renderer to meet specific outcome as per requirement.	<input type="checkbox"/>	<input type="checkbox"/>
8. Add scene of 3D model according to specification	<input type="checkbox"/>	<input type="checkbox"/>
9. Add lights for illumination to get the requisite scene of 3D model.	<input type="checkbox"/>	<input type="checkbox"/>
10. Assign cameras to execute different views of 3D Model.	<input type="checkbox"/>	<input type="checkbox"/>
11. Render the 3D model according to required image size or resolution & orientation.	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	0611ICT10National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Purpose of Assessment	Summative Assessment
Candidate Details	Name: _____ Registration Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task	Create a 3D 'House Model according to given sample (Annexure-A) and take the printout of the model from different views.		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Create/import/link/fetch/merge 2D drawing to make 3D objects according to given specification			
2. Use Geometry & shapes to make 3D objects according to given specification.			
3. Modify Parameters of 3D objects according to given specification.			
4. Apply modifiers for object manipulation to meet the specific requirements.			
5. Create/assign specified materials and textures to 3D Model.			
6. Edit materials and textures to get realistic outcome.			
7. Assign/Install Renderer to meet specific outcome as per requirement.			
8. Add scene of 3D model according to specification			
9. Add lights for illumination to get the requisite scene of 3D model.			
10. Assign cameras to execute different views of 3D Model.			
11. Render the 3D model according to required image size or resolution & orientation.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	

Knowledge Assessment

Qualification	0611ICT10National Vocational Certificate Level-4 in Information Technology (3D Studio MAX)
Purpose of Assessment	Summative Assessment
Candidate Details	Name: _____ Registration Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Why would you want to use Schematic View?		
2.	What is the use of 3D Orbit?		
3.	The shortcut H command is used for what purpose?		


4.	What is the purpose of Viewport Navigation?		
5.	Can you create 2D objects or drawings in 3D Max?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

National Vocational and Technical Training Commission (NAVTTTC)

 Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan

 +92 51 9044 322

 +92 51 9044 322

 info@navttc.org

 www.navttc.org